SSVEO IFA List

Date:02/27/2003

STS - 104, OV - 104, Atlantis (24)

Time:03:44:PM

Tracking No	Time	Classification	Documentation		Subsystem
MER - 4	**MET:** 001:15:29	Problem	**FIAR**	**IFA** STS-104-V-01	Active Thermal Control
EECOM-01	**GMT:** 195:00:32		**SPR** 104RF03	**UA**	Subsytem
			IPR 110V-0002	**PR** ECL-4-25-1265	**Manager:** Son Nguyen
					714-372-5058
					Engineer: Carmelo
					Asuncion
					281-853-1635

Title: Forward Bulkhead Floodlight Coldplate Return Line Low Temperature (ORB)

Summary: The temperature of the coldplate return line for the forward bulkhead floodlight reached 36 ?F during rendezvous and docking. Previous OV-104 flight data shows significantly colder temperatures on this line than on other vehicles. Flight data from OV-103 and OV-105 show temperatures above 60 ?F. The data indicates that OV-104 may have a configuration problem with the water-loop insulation being incorrectly installed and/or the sensor being incorrectly located. The line needs to be maintained above 32?F to avoid freezing the water. A plan was implemented to increase water coolant loop 1 pump cycles from 1 cycle every 4 hours to every 1 hour to ensure that freezing did not occur. During KSC troubleshooting, blankets were removed and inspected. The inspection revealed a section of line approximately 10 inches long was not wrapped with the LT-80 aluminum tape at the temperature sensor location.

Floodlight Coldplate water lines have been returned to print.

Tracking No	Time	Classification	Documentation		Subsystem
MER - 5	**MET:** 003:13:30	Problem	**FIAR**	**IFA** STS-104-V-02	Active Thermal Control
EECOM-03	**GMT:** 196:22:34		**SPR** 104RF01	**UA**	Subsytem
			IPR 110V-0001	**PR** ECL-4-25-1267	**Manager:** Son Nguyen
					714-372-5058

Engineer: Carmelo Asuncion 281-853-1635

Title: FES Hi-Load and Accumulator Feedline A System 1 Heater Failed Off (ORB)

Summary: At approximately 196:22:34 G.m.t. (003:13:30 MET), the FES hi-load and accumulator feedline A system 1 heater failed to cycle on when expected. The accumulator line temperature sensor (V63T1892A), which is located near the thermostat, typically indicates no-less-than 64 ?F prior to the heater cycling on. The accumulator line temperature dropped to 53 ?F at which time the system 2 heater was selected and nominal heater cycling was observed. The hi-load line temperature sensor (V63T1895A), that typically indicates no-less-than 120 ?F dropped to 89 ?F prior to selection of the system 2 heater. There was no mission impact. During troubleshooting KSC determined that heater thermal switch was bad. The FES heater thermal switch was R&R'd and that should correct the problem with the heaters.

Tracking No	Time	Classification	Documentation		Subsystem
MER - 10	**MET:** 008:01:35	Problem	**FIAR**	**IFA** STS-104-V-03	C&T - Ku-band
INCO-03	**GMT:** 201:10:39		**SPR** 104RF04	**UA**	**Manager:** Rasik Patel
			IPR 110V-0003	**PR**	714-372-6711
					Engineer: Marty O'Hare
					281-853-1592

Title: Loss Of Ku-band Forward Link (ORB)

Summary: On orbit 127 at AOS of the TDRS West satellite [201:10:39 G.m.t. (008:01:35 MET], the Ku-band system was powered up from standby and acquired the forward link as indicated by a strong automatic gain control (AGC) signal of –90 dBm. However, the electronic assembly 1 did not indicate either "detect" or "track". After unsuccessful attempts to recover normal operations by commanding different antenna steering modes, the ground controller commanded the system off and had the crew cycle the Ku-band ELEC and SIG PROC circuit breakers on panel R 14. The crew then powered the system back on and normal operations were recovered.

There were two additional occurrences of the Ku-band system failing to detect and track the forward link. The events occurred on orbit 148 while on the West TDRS satellite and on orbit 153 on the East TDRS satellite. The Ku-band system recovered normal operation from both events without power cycling the system. Subsequent to these occurrences, there were several additional failures of the system to detect and track the forward link on FD 12. KSC will perform troubleshooting.

Tracking No	Time	Classification	Documentation		Subsystem
MER - 12	**MET:** 012:18:28	Problem	**FIAR**	**IFA** STS-104-V-04	MECH
MMACS-04	**GMT:** 206:03:32		**SPR** 104RF05	**UA**	**Manager:** Paul Reese
			IPR 110V-0007	**PR**	714-372-5062
					Engineer: Jeff Goodmark
					281-853-1570

Title: LH Vent Door 8 & 9 Motor 2 Open Indication Failed Off (ORB)

Summary: Post entry interface (EI) when the Orbiter vent doors were opened at 206:03:32:32 G.m.t. (012:18:28:33 MET), the left hand vent door 8 and 9 closed indications went off and the motor 1 open indication came on as expected. However, the motor 2 open indication failed off and the motor continued to run. The motor was turned off by the software after driving for 10 seconds. The motor 2 open indication came on approximately 1 minute and 45 seconds later.

KSC will perform troubleshooting to try to recreate the problem. Wire verification will be performed.